

IDD-II FLAME DETECTOR



FLAME DETECTORS

RELIABLE FLAME DETECTION FOR OIL, COAL, AND LIGNITE.

Forney's Intelligent Dynamic Detector is designed to accurately detect and discriminate the luminous flames produced by fuel oil, coal, and lignite fuels. The IDD-IIU (Unfiltered) Flame Detector is generally used for sensing fuel oil and coal flames. The IDD-III (Lignite) Flame Detector is specifically designed to sense low flame frequency produces by lignite flames.

The Intelligent Dynamic Detector is used in conjunction with Forney's supporting amplifiers DR-6101E, DR-6101, RM-IDD, IDD-III A.

The IDD-II's solid state circuitry amplifies a continuously changing voltage signal transmitted from the lead sulfide sensor when flame is sensed. The signal is sent to the amplifier by way of a four conductor cable. The amplifier processes the signal and provides outputs to the burner management system.

For trouble-free operation, the electronics of the detector are potted within the cast aluminum housing. In addition, the amplifier also initiates a periodic check of the sensor and printed circuit board to verify proper operation of the detector assembly.



- **LEAD SULFIDE SENSOR-** Sensitive to infrared and visible light radiation prevalent in fuel oil, coal and lignite flames.
- **DYNAMIC FLAME SENSING CIRCUITRY** – Senses only a dynamic flame signal, not hot refractory.
- **COMPACT, DURABLE ASSEMBLY** - The printed circuit board and sensor are potted within a cast aluminum housing providing a maintenance free component.
- **FM APPROVAL** - Factory Mutual approval means safe operation and lower insurance rates.
- **SIMPLIFIED MAINTENANCE**-Quick disconnect, electrical and mechanical connections are used for easy replacement.
- **FIBER OPTIC CONNECTIONS** Optional fixtures are available for fiber optic applications.



Re-powering your world





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INTELLIGENT DYNAMIC FLAME DETECTOR

PRODUCTS AND ACCESSORIES

IDD-II	Filtered (Coal & #6 Oil)	Part #3832101
IDD-IIU	Unfiltered (#2 Oil & Gas)	Part #3832102
IDD-IIL	Lignite Fuel	Part #33923401
Cooling Chamber (optional)		Part #38107101

SPECIFICATIONS

Mounting:	1" N PT sight pipe fitting
Materials:	Cast Aluminum Housing, Potted Electronics
Electrical:	Supplied by Amplifier, 50VDC and 12VDC
Electrical Connections:	MS Bayonet connector supplied with cable, 1/2" flexible conduit required
Temperature Ratings:	32°F to 140°F, 0°C to 60°C, up to 180°F (82°C) with the optional cooling chamber
Humidity:	0-95% Rh-Non-condensing
Shipping Weight:	21 oz
Cooling Air:	10 SCFM
Approvals:	Factory Mutual
Sensor / Wavelength:	Lead Sulfide cell / 400 - 3300nm

